The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS

AND INTERFERENCES

Ex parte KENNETH C. YUERGENS

Appeal No. 2000-0760 Application No. 08/831,198

ON BRIEF

Before CALVERT, COHEN, and GONZALES, <u>Administrative Patent</u> <u>Judges</u>.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 2 to 5, 7, 8, 10 and 12, all the claims remaining in the application.

The claims on appeal are drawn to a torsional vibration damper, and are reproduced in the appendix of appellant's $brief.^1$

The references applied in the final rejection are:2

Göbel et al. (Göbel) 4,637,500 Jan. 20, 1987 Yanko et al. (Yanko) 5,246,399 Sep. 21, 1993

The appealed claims stand finally rejected on the following grounds:

- (1) Claims 2 to 5 and 12, unpatentable over Yanko, under
 35 U.S.C. § 103(a);
- (2) Claims 7, 8 and 10, unpatentable over Yanko in view of Göbel, under 35 U.S.C. § 103(a).

Rejection (1)

First considering claim 2, the manner in which the

¹ We note that the copies of claims 7 and 8 in the appendix do not include the changes made by the amendment filed on April 13, 1998.

² The number of the Göbel patent is given incorrectly on page 3 of the examiner's answer.

structure disclosed by Yanko corresponds to the elements recited in this claim is set forth by the examiner on page 4 of the answer, and need not be repeated here. The difference between the claimed apparatus and that of Yanko is expressed in the following limitation (claim 2, lines 18 to 20, emphasis added):

the retainer plates being spaced apart and connected to each other[3] by means of individual drive blocks that

are disposed partly in the notch of the outer drive plate and partly in the notch of the inner drive plate.

The Yanko apparatus does not employ individual drive blocks to space and connect retainer plates 88, 92, but instead has a series of circumferentially spaced enlarged portions 36 positioned on a ring 32 (Fig. 3) fastened between the retainer plates by rivets 90 (Fig. 2). The examiner takes the position that (answer, page 4):

Having individual drive blocks disposed in the

 $^{^3}$ In appellant's disclosed apparatus, it appears that the retainer plates 38, 40 are actually connected to each other by rivets 48, with the drive blocks 46 being sandwiched in between the plates, rather than being connected by the blocks per se.

notches of the inner and outer drive plates instead of the drive blocks being connected together would provide of [sic] an assembly that has less weight and would allow for one of the blocks to be replaced if it were damaged instead of having to replace the entire ring. It would have been obvious for one of ordinary skill at the time the invention was made to replace the ring of drive blocks with individual drive blocks so [as] to reduce the weight of the assembly and to allow for one of the blocks to be replaced if it were damaged.

She also argues (id., page 6):

Yanko et al teaches blocks that [sic] 40 that are part of a ring 32. Each block 40 is located in its own window, note figure 1; and each block is riveted to the retainer plates 88, 92, note figure 2. The [sic] since each block is fixed to the retaining plates the ring is not necessary and only adds additional weight to the assembly. If the element is not necessary then it is obvious to eliminate that element. See In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965).

. . . Since it is well recognized that weight is a problem in the automobile industry, removing unnecessary elements to reduce the weight of the assembly would not be improper hindsight reconstruction.

After fully considering the record in light of the arguments presented in appellant's brief, supplemental brief and reply brief, and in the examiner's answer, we conclude that claim 2 is patentable over Yanko.

Where, as here, obviousness is based on a single prior art reference, there must still be a showing of a suggestion

or motivation to modify the teachings of that reference. <u>In</u>

<u>re Kotzab</u>, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed.

Cir. 2000). We do not find any such suggestion here, there

being no indication in Yanko of the desirability of saving

weight or ease of replacement; rather, the examiner's finding

of obviousness appears to be based on improper hindsight

gleaned from appellant's own disclosure.

The Larson case cited by the examiner is not persuasive. In that case, the Court stated that "If this additional features [sic: feature][disclosed by the reference] is not desired, it would seem a matter of obvious choice to eliminate it and the function it serves." 340 F.2d at 969, 144 USPQ at 350. This has been expressed by the Supreme Court as "if the omission of an element is attended by a corresponding omission of the function performed by that element, there is no invention, if the elements retained perform the same function as before." Richards v. Chase Elevator Co., 159 U.S. 477, 486 (1895). Note, however, In re Wright, 343 F.2d 761, 769-70, 145 USPQ 182, 190 (CCPA 1965) (determination of obviousness must be based on § 103, and not upon a "mechanical rule" such as this one). In the present case, assuming that the function

of the portions 54 of Yanko's ring 32 is to hold the "blocks" 36 in position (i.e., prevent them from rotating about the axes of holes 94), appellant's purported elimination of these portions 54 would not eliminate the function they serve, because appellant's apparatus also performs that function. Thus, applying the above-quoted language from <u>In re Larson</u>, elimination of portions 54 of Yanko's ring would not have been "a matter of obvious choice."

Accordingly, the rejection of claim 2, and of claims 3 to 5 and 7 dependent thereon, will not be sustained. Likewise, the rejection of claim 12, which also recites individual drive blocks, will not be sustained for the same reasons as claim 2.

Rejection (2)

Claim 7 is dependent on claim 2. Its rejection will not be

sustained since Göbel does not overcome the above-discussed deficiency of Yanko.

Claim 8 does not recite any drive blocks, but does claim in lines 5 to 9:

one retainer plate extends radially

inwardly and carries an annular friction disk on an inner surface confronting the inner drive plate and the inner drive plate carries a spring that engages an outer surface of the one retainer plate to bias the friction disk into engagement with the inner drive plate to create a hysteresis effect.

Yanko discloses a conical spring washer 126 located between the inner surface of retainer plate 88 at 118 confronting inner drive plate 60 (Fig. 2), the washer 126 pressing against the retainer plate 88 and drive plate 60 to create frictional drag (col. 6, lines 57 to 66). Göbel discloses a torsional vibration damper in which friction pads 16 are located between the inner surfaces of the retainer plates 11, 12 and the inner drive plate 7, the retainer plates ("cover plates") being "initially stressed in the direction towards the hub flange 7 and act as friction devices" (col. 3, lines 43 to 46). The examiner states that it would have been obvious in view of Göbel to include a friction disc between the inner drive plate and retainer plate of Yanko. Acknowledging that Göbel does not disclose a spring engaging the outer surface of the retainer plate, as claimed, she finds that inclusion of such a spring would have been obvious since "[a] spring to bias elements into engagement is old and well

known" (answer, page 5).

We do not consider this rejection to be well taken. the first place, the examiner has cited no evidence which would teach or suggest the use of a spring; Göbel teaches that the retainer plates are "initially stressed," which would remove the necessity for using a spring. Secondly, even if a spring were used, it is not apparent how one of ordinary skill in the art would have incorporated it in the Yanko apparatus. If a friction disc were used instead of Yanko's spring washer 126, then, in order to meet the limitations of claim 8, the spring would have to be positioned between the outer surface of retainer plate 88 and element 158 in order to engage an outer surface of the retainer plate, as claimed. However, one of ordinary skill would not have found it obvious to have located the spring in that position because element 158 is a piston which moves axially (col. 8, lines 63 to 68), and such movement would change the force exerted by the spring.

We therefore will not sustain the rejection of claim 8, or of its dependent claim 10.

Conclusion

The examiner's decision to reject claims 2 to 5, 7, 8, 10 and 12 is reversed.

REVERSED

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IAN A. CALVERT

Administrative Patent Judge

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BOARD OF PATENT

IRWIN CHARLES COHEN

Administrative Patent Judge

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INTERFERENCES

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